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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,283	12/12/2003	Kunio Kishimoto	43890-620	8247

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EXAMINER
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PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/733,283	Applicant(s) KISHIMOTO ET AL.	
	Examiner Joseph L. Perrin, Ph.D.	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 50-66 is/are pending in the application.
- 4a) Of the above claim(s) 55-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/736,499.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20031212</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of species II, Figure 5, with claims 50-54 readable thereon in the reply filed on 09 February 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The Examiner acknowledges that upon allowance of a generic claim applicant is entitled to consideration of other species in dependent form or otherwise include all limitation of the allowable generic claim in accordance with 37 CFR 1.141.

2. Claims 55-66 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 09 February 2006.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 50-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Regarding claim 50, the word "means" is preceded by the word(s) "selective removing" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). That is, "selective removing" is indefinite because it is an incomplete function since it is unclear what is selectively removed.

Applicant is reminded of proper language for invoking 112, sixth paragraph (MPEP §2181(I)):

A claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis:

(A) the claim limitations must use the phrase "means for " or "step for ";

(B) the "means for " or "step for " must be modified by functional language; and

(C) the phrase "means for " or "step for " must not be modified by sufficient structure, material or acts for achieving the specified function.

With respect to the first prong of this analysis, a claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph. If an applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant must either: (A) amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines; or (B) show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. 112, sixth paragraph. See *Watts v. XL Systems, Inc.*, 232 F.3d 877, 56 USPQ2d 1836 (Fed. Cir. 2000) (Claim limitations were held not to invoke 35 U.S.C. 112, sixth paragraph, because the absence of the term "means" raised the presumption that the limitations were not in means-plus-function form, nor was the presumption rebutted.); see also *Masco Corp. v. United States*, 303 F.3d 1316, 1327, 64 USPQ2d 1182, 1189 (Fed. Cir. 2002).

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In the instant case, applicant is urged to conform with step (A) of the 3-prong analysis in order to clearly set forth their intention to invoke 112, sixth paragraph. For instance, language such as “means for selectively removing ...” conforms with the 3-prong analysis and is recommended.

6. In claim 50, the claimed “selective removing means” renders the claim indefinite because it is unclear how a plate can perform the active function of selectively removing unnecessary material. There appears to be missing plate structure which performs the function to control resonance. Thus, since the language “resonance control” in the claim limitation is directed to intended use without any structural limitation the position is taken that any plate would read on “resonance control plate” since any material would have at least some affect on resonance from an oscillator. Correction and clarification on what structures “selectively remove said unnecessary material” is required.

7. Claim 51 recites the limitation “said carrying means” in line 7. There is insufficient antecedent basis for this limitation in the claim. As best understood from the original disclosure, the “carrying means” is believed to refer to the “feeding device” of claim 50 and the claims will be examined accordingly. However, clarification and correction are still required.

8. Claim 52, 53 & 54 recite the limitation “said resonance control plate” in lines 7-9, 2, and 2, respectively. There is insufficient antecedent basis for this limitation in the claim. Specifically, the claim from which they depend (claim 50) is directed to the plural “resonance control plates” and the dependent claims should refer to same in order to provide proper antecedent basis.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 50-52 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-224015 (hereinafter “JP ‘015”; cited by applicant, electronic translation supplied by Examiner). As shown in Figure 4, JP ‘015 discloses a cleaning device for a substrate (6) comprising an oscillating device (13) in a tank, cleaning via high frequency oscillation in a liquid (see paragraph [0024], substrate feeding means (22), and metallic plates (15) around the substrate (6) (see Figure 1(f)) which inherently have an affect on resonance from energy emitted from the oscillating device to a degree, thus reading on “resonance control plates”. In paragraph [0039], a process may be repeated which indicates that the plates (15) on the substrate feeding means (22) during a process reads on the plates being part of the feeding means. Accordingly, the device of JP ‘015 reads on applicant’s claimed invention.

11. Claims 50-54 rejected under 35 U.S.C. 102(b) as being anticipated by EP 329 807 (hereinafter “EP ‘807”; cited by applicant). As shown in Figures 1-3, EP 807 discloses a cleaning device for a substrate comprising an oscillating device (17) in a tank with cleaning liquid, substrate feeding means (rollers 7/8/9), and water flow

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generators (14/24). Re claims 51-54, since the resonance control plates are in Markush-type format the species are considered to be in alternative format.

Accordingly, the water flow generator, diffusing plate and resonance control plates are construed to be alternative. Recitation of EP '807 reads on applicant's claimed invention.

### ***Conclusion***

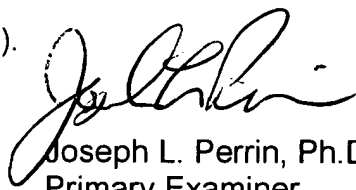
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,058,950 to FUJII *et al.*, U.S. Patent No. 5,836,325 to AKANUMA *et al.*, U.S. Patent No. 5,775,350 to AKANUMA *et al.*, U.S. Patent No. 5,709,235 to AKANUMA *et al.*, & U.S. Patent No. 5,203,798 to WATANABE *et al.*, each disclosing a supersonic substrate cleaner with feeding means and water flow in a cleaning tank.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1746

jlP